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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,099	07/26/2001	Norio Oku		9770
26021	7590	09/20/2005		
HOGAN & HARTSON L.L.P. 500 S. GRAND AVENUE SUITE 1900 LOS ANGELES, CA 90071-2611			EXAMINER DI GRAZIO, JEANNE A	
			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.	Applicant(s)	
09/917,099	OKU ET AL.	
Examiner	Art Unit	
Jeanne A. Di Grazio	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on RCE June 27, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 24-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-23 and 33-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claims***

Claims 16-23 and 33-37 are pending per RCE Amendment of June 27, 2005. Claims 1-15 and 24-32 have previously been withdrawn. Claims 33-37 are new per Amendment of June 27, 2005.

### ***Priority***

Priority to Japanese Patent Application No. 2000-229575 (July 28, 2000) is claimed.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 22, 2005 has been entered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 16, 17, 20-23 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 5,677,749 (to Tsubota et al.) in view of United States Patent 6,222,603 B1 (to Sakai et al.) and further in view of United States Patent 6,211,938 B1 (to Mori).

As to claims 16 (amended), 17 and 20-23, Tsubota teaches and discloses a step of disposing a thermosetting sealing member around an outer peripheral region of a display area substrate (Figure 1, sealing member #64, substrate #63 ; see also Column 3, Line 4), heating and curing the thermosetting seal material while applying a load to an upper surface plate of a display panel body through upper and lower surface plates (Figure 3, display panel body = 204-206 ; upper surface plate 201 ; lower surface plate 206)(Applicant's "heating and curing said

Art Unit: 2871

thermosetting seal material while applying a pressure from said outer surface of said display panel body to between said substrates through said buffer plates”). Tsubota also teaches and discloses an elastic sheet having a profile corresponding to panel display areas (Figure 10, elastic sheet 33).

Please also note that Tsubota illustrates in Figure 26, a pressuring member having a groove – it looks like a lattice type structure. Also, Figure 33 shows a buffering layer having a groove – again, it looks like a lattice type structure.

Tsubota does not appear to explicitly specify a thermally conductive buffer plate of a rigid film having a high rigidity and buffer films of a lower rigidity than the rigidity of the rigid film.

Sakai teaches and discloses a method of manufacturing a liquid crystal display device with a double seal (Title, entire patent). With reference to Sakai’s third embodiment / Figure 7 (by way of non-limiting example), Sakai teaches and discloses a buffer plate (12) having a hard layer (200) covered by an elastic layer (100). Sakai explicitly teaches and suggests that the elastic layer (100) absorbs dispersion of thickness and bending of two substrates while the hard layer (200) vertically repulses pressure to any point of the substrates (Column 6, Lines 54-67).

That is, Sakai provides one of ordinary skill in the field of liquid crystals with a reason, suggestion, and motivation for having a layered buffer plate for (1) absorbing dispersion of thickness and bending of substrates and (2) for vertically repulsing pressure at any point on substrates (Id.).

Please note that it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. A buffer plate having a hard layer sandwiched by

Art Unit: 2871

elastic layers would be within the realm of one skilled in the art of liquid crystals in light of the Sakai teaching that an elastic layer as part of a buffer plate ensemble absorbs dispersion of thickness and bending of substrates.

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Tsubota in view of Sakai for a manufacturing method in which a buffer plate assembly provides for more constantly forming a uniform cell gap (Sakai at Column 6, Lines 62-63).

Tsubota may not appear to explicitly describe that the plates are each provided on said two sides of said outer surfaces of said pair of substrate.

However, Mori teaches and discloses an apparatus for manufacturing a plurality of liquid crystal panels using press and pressurized regions in which it is known (Figure 1) that fixing jigs (32 and 34) are provided at sides of substrates (31) with a sealant (42) that acts as a spacer. The fixing jigs serve to press the substrates together without warping the substrates. (Column 1, Lines 15-45).

Please also note (RE: claim 23), that sealant serves as a spacer such that there is no further need to have spacers in the assembled device.

It would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Tsubota in view of Mori's prior art to prevent a warping of substrates.

As to claim 33 (new), as previously noted, Tsubota teaches that the substrates are adhered without spacers in the display region. Please further note that the prior art of Mori teaches that the sealant acts as a spacer.

As to claims 34-37 (all new), mere duplication of parts has no patentable significance unless a new and unexpected result is produced – See MPEP 2143.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 5,677,749 (to Tsubota et al.) in view of United States Patent 6,222,603 B1 (to Sakai et al.) and further in view of United States Patent 3,655,477 (to Scholl et al.).

As to claims 18 and 19, Tsubota does not appear to explicitly specify buffer film of polytetrafluoroethylene.

Scholl teaches and discloses a method of making heat sealed articles in which a buffer film of polytetrafluoroethylene is preferred so that melted heat seal may be prevented from sticking to a die (Column 2, Lines 55-66).

Scholl is evidence that ordinary workers in the field of liquid crystals and methods of manufacturing LCD panels would have found the reason, suggestion and motivation to form buffer films of polytetrafluoroethylene so that melted heat seal may be prevented from sticking to a die (Column 2, Lines 55-66).

Therefore, it would have been obvious to one of ordinary skill in the art of liquid crystals at the time the invention was made to modify Tsubota in view of Scholl so that melted heat seal may be prevented from sticking to a die (Column 2, Lines 55-66).

***Response to Arguments***

Applicant's arguments with respect to claims 16-23 have been considered but are moot in view of the new ground(s) of rejection.

However, the Examiner responds to Applicant's argument regarding the Scholl reference.

Applicant argues "[t]he Scholl reference relates to a technical field which completely differs from a display device, and therefore, a person with ordinary skill in the art would not be motivated to combine Scholl with Tsubota and Sakai." (Remarks of April 25, 2005 at pages 13-14).

Please note that the Scholl reference was offered to provide a reason for using polytetrafluoroethylene as a buffer film material.

In response to applicant's argument that Scholl is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

In this case, Scholl is directed to a method of making heat sealed articles in which a buffer film of polytetrafluoroethylene is preferred so that melted heat seal may be prevented from sticking to a die. Applicant's invention is directed to heat pressing substrates via a buffer film. As such, the Scholl reference is reasonably pertinent to the particular problem with which Applicant is concerned – that of heat pressing / heat sealing.



***Conclusion***

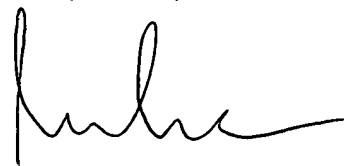
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanne A. Di Grazio whose telephone number is (571)272-2289. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached on (571)272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeanne Andrea Di Grazio  
Patent Examiner  
Art Unit 2871

JDG



DUNG T. NGUYEN  
PRIMARY EXAMINER